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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,271	10/17/2000	Se-Lee Chang	12495-002001	3672

7590

02/22/2002

Y. Rocky Tsao  
Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804

EXAMINER
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BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 02/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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<b>Office Action Summary</b>	<b>Application No.</b> 09/690,271	<b>Applicant(s)</b> CHANG, SE-LEE ET AL	
	<b>Examiner</b> Susan W Berman	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All    b) ☐ Some    c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

### *Specification*

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973). The section entitled cross reference to related applications on page 1 should be deleted. This section should refer only to applications filed in the United States.

The use of the trademarks has been noted in this application. Each trademark should be fully capitalized wherever it appears and be accompanied by the generic terminology. The disclosure of photoinitiators, leveling/defoaming agents and antioxidants on pages 9-11 by tradenames alone results in an inadequate description of the invention. Each tradenamed material should be identified by generic terminology, such as chemical names, the chemical structures or the methods of preparation of the materials intended.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The disclosure is objected to because of the following informalities:

The components of the composition set forth are not a photopolymerizable acrylate composition but are the components employed to obtain the photopolymerizable urethane acrylate oligomer containing

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polydimethylsiloxane that is a component of the photopolymerizable resin composition. See page 4 of the specification.

The names of the polyol compounds containing polydimethylsiloxane disclosed on page 5 include compounds such as ~~how~~ “1,4-bis(hydroxydimethyl)benzene” or “diphenylsilanediol” that do not provide a polyol compound containing polydimethylsiloxane and include the disiloxanes “1,3-“ or “1,4-bis(hydrobutyl)tetramethyldisiloxane” wherein “hydro” should read “hydroxy” to denote a hydroxy rather than a hydrogen group.

It is suggested that the “polyol copolymer” component (b) be defined as a “polyol” instead of “polyol copolymer” because the polyols disclosed on page 5 do not appear to be copolymers. The polyols disclosed, such as polyether polyol or polyester polyol, could be oligomeric or polymeric. The polyols disclosed, such as ethylene glycol or propylene glycol, would not provide copolymers unless used in mixtures. When the polyols are used in mixtures a copolymer would be obtained, but a copolymer was not employed in the composition for making the urethane acrylate.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 3, it is suggested that “synthesized with a photopolymerizable urethane acrylate oligomer composition” should read “synthesized from a composition comprising...”. The components of the composition set forth are not a photopolymerizable acrylate composition but are the components employed to obtain the photopolymerizable urethane acrylate oligomer containing polydimethylsiloxane

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that is a component of the photopolymerizable resin composition. The components set forth in claim 2 appear to be intended to be polymerized using a urethane reaction catalyst, not a photopolymerization. In claim 2, line In claim 2, line 7, and in claim 10, line 2, it is believed that "polymerization initiator" should read "polymerization inhibitor". See pages 4 and 7 of the specification.

Claim 4: The use of the tradename "His 2111" in the claim renders the claim indefinite because the tradenamed material is subject to change in composition. "His 2111" should be replaced with a chemical structure, method of preparation or other definition of the tradenamed material. It is not clear how "1,4-bis(hydroxydimethyl)benzene" or "diphenylsilanediol" provides a polyol compound containing polydimethylsiloxane. It is believed that "1,3-" or "1,4-bis(hydrobutyl)tetramethyldisiloxane" should read "1,3-" or "1,4-bis(**hydroxy**butyl)tetramethyldisiloxane" to denote a hydroxy rather than a hydrogen group.

✓ Claim 6: it is not clear whether applicant intends to recite polyol copolymers obtained by copolymerizing the polyols set forth or to claim the polyols set forth as components for obtaining the urethane acrylate. How can the polyol comprise the alkylene oxide repeat units set forth if the polyol is a "polyester polyol" or a " polycarbonate polyol"? Does applicant intend to claim a copolymer of a polyester polyol and ethylene glycol or propylene glycol, for example?

✓ Claim 11: line 8, the word "type" renders the claim indefinite. It is suggested that the recitation of "ethylene oxide added type triethylpropane triacrylate" be changed to "ethoxylated triethylpropane triacrylate" as set forth in the specification on page 8.

Claims 12-14 are rendered indefinite by the use of tradenames in the claims. The tradenames should be replaced with the chemical names, the chemical structures or the methods of preparation of the materials intended.

Claims 15-19 provide for the use of the resin composition of claim 1, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is

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intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 15-19 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). How is the "resin" prepared? Does applicant intend to claim a method for preparing the resin by exposing the resin composition to irradiation in the presence of the photoinitiator? If so, it should be so stated.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-3, 6-9, 11-15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi et al (5,986,018). Yamaguchi et al disclose resin compositions comprising a dialkylpolysiloxane urethane (meth)acrylate for producing cured products, such as a ribbon matrix material for optical fibers, having a slippery surface. See column 2, lines 36-44, column 4, lines 25-37, column 8, column 9, line 54, to column 10, line 9, column 10, line 38, to column 11, line 19, and the Examples.

Claims 1-3, 5-9, 11-15 and 17 are rejected under 35 U.S.C. § 102(e) as being anticipated by Tortorello (6,023,547). Tortorello discloses radiation curable compositions comprising a urethane oligomer having a polyester backbone. Other polyol compounds that can be employed to obtain the urethane include polydimethylsiloxane polyols (column 8, lines 9-13, and column 9, lines 5-20). See column 10-11 and column 12, lines 21-51, column 13, lines 11-20.

Claims 16, 18 and 19 are rejected under 35 U.S.C. § 102(e) as being anticipated by each of Yamaguchi et al and Tortorello. Since Patentees disclose resin compositions comprising components corresponding to those set forth in the instant claims and teach that the disclosed resins provide slip characteristics, the properties set forth in the instant claims would be expected to be inherent properties of the prior art products in the absence of evidence to the contrary.

The burden is hereby shifted to applicant to establish by effective argument and/or objective evidence that the prior art product(s) or process(es) do not necessarily possess the characteristics of the claimed products or processes. Note In re Spada, 911 F. 2d 705, 709, 15 UPQ2d 1655, 1658 (Fed. Cir. 1990), “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not”. Note In re Fitzgerald, 205 USPQ 594 (CCPA 1980). The reference discloses all the limitations of the claim(s) except a property or



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function and the examiner cannot determine whether or not the reference inherently possesses properties or functions which anticipate the claimed invention. See MPEP 2112-2112.02.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al or Tortorello in view of Szum et al (6,298,189 B1).

Szum et al disclose compositions for coating optical fibers having excellent ribbon stripping and adhesion behavior. Szum et al teach covalently incorporating a slip agent, such as a silicone, into the disclosed composite oligomer (column 22, line 14, to column 23, line 10, column 24, lines 29-57). See column 25, lines 6-31, column 25, line 58, to column 26, line 2, Table 2, column 28, lines 37-41, column 40, lines 34-39.

It would have been obvious to one skilled in the art to employ one of the polydimethylsiloxane diols disclosed by Szum et al for obtaining incorporating a slip agent into a urethane acrylate to provide the urethane acrylate including a siloxane polyol component taught by Yamaguchi et al or Tortorello. Each of Yamaguchi et al and Tortorello provides motivation by teaching urethane acrylates obtained from a polydimethylsiloxane diol that provides slip characteristics. Szum et al provide motivation by teaching compositions for coating optical fibers having excellent ribbon stripping and adhesion behavior wherein a slip agent, such as a silicone, is covalently incorporated into the disclosed composite oligomer

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Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al or Tortorello. Each of Yamaguchi et al and Tortorello teach adding thermal polymerization inhibitors to the disclosed photopolymerizable compositions. It would have been obvious to one skilled in the art to select any of the inhibitors recited in claim 10 because these are thermal polymerization inhibitors well known to one skilled in the art.

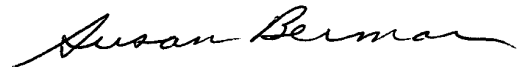
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Berman whose telephone number is (703) 308-0040.

The fax number for this group is (703) 872-9310 or, after Final Rejection, 703-872-9311.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

SB  
1/24/02



Susan Berman  
Primary Examiner  
Art Unit 1711